



Search Report

EIC 1700

STIC Database Tracking Number: 2440

To: JOHN HARDEE
Location: REM-9A41
Art Unit: 1796
Tuesday, November 27, 2007
Phone: (571) 272-1318
Case Serial Number: 10 / 507203

From: JAN DELAVAL
Location: EIC1700
REM-4B28 / REM-4A30
Phone: (571) 272-2504

jan.delaval@uspto.gov

Search Notes

SEARCH REQUEST FORM

Scientific and Technical Information Center

Access DB# 244061

Requester's Full Name: Harde Examiner #: 42736 Date: 11/27/07
 Art Unit: 1796 Phone Number 30 21318 Serial Number: 10/507,203
 Mail Box and Bldg/Room Location: 9A41 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Whatever you can find. Thanks

SCIENTIFIC REFERENCE BP
 Sci & Tech Inf Ctr

NOV 27

Pat. & T.M. Office

Please Rush
11/27/07
SPE 1796

STAFF USE ONLY

Searcher: an

Searcher Phone #: _____

Searcher Location: _____

Date Searcher Picked Up: 11/27/07

Date Completed: 11/27/07

Searcher Prep & Review Time: _____

Clerical Prep Time: 20

Online Time: 40

Type of Search

NA Sequence (#) _____

AA Sequence (#) _____

Structure (#) ✓

Bibliographic _____

Litigation _____

Fulltext _____

Patent Family _____

Other _____

Vendors and cost where applicable

STN ✓

Dialog _____

Questel/Orbit _____

Dr.Link _____

Lexis/Nexis _____

Sequence Systems _____

WWW/Internet _____

Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 13:14:40 ON 27 NOV 2007

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STRUCTURE FILE UPDATES: 26 NOV 2007 HIGHEST RN 955995-34-3

DICTIONARY FILE UPDATES: 26 NOV 2007 HIGHEST RN 955995-34-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

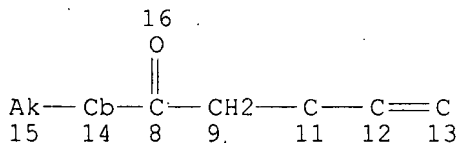
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d sta que 145

L41 STR



NODE ATTRIBUTES:

CONNECT IS M1 RC AT 11

CONNECT IS M1 RC AT 12

CONNECT IS M1 RC AT 13

DEFAULT MLEVEL IS ATOM

GGCAT IS MCY AT 14

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L42 201673 SEA FILE=REGISTRY ABB=ON PLU=ON 46.150.2/RID

L45 52 SEA FILE=REGISTRY SUB=L42 SSS FUL L41

100.0% PROCESSED 2742 ITERATIONS

52 ANSWERS

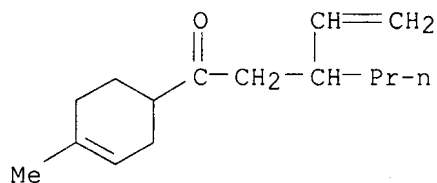
SEARCH TIME: 00.00.01

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L51 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2007 ACS on STN

RN 597533-65-8 REGISTRY

ED Entered STN: 03 Oct 2003
CN 1-Hexanone, 3-ethenyl-1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)
MF C15 H24 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

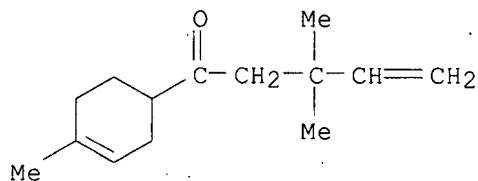


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:245701

L51 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2007 ACS on STN
RN 597533-64-7 REGISTRY
ED Entered STN: 03 Oct 2003
CN 4-Penten-1-one, 3,3-dimethyl-1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)
MF C14 H22 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



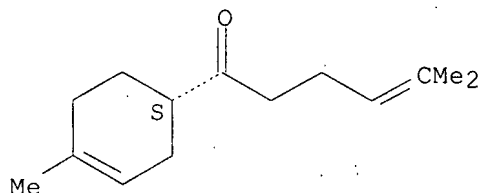
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:245701

L51 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2007 ACS on STN
RN 170080-86-1 REGISTRY
ED Entered STN: 15 Nov 1995
CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)-, (S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C14 H22 O
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.

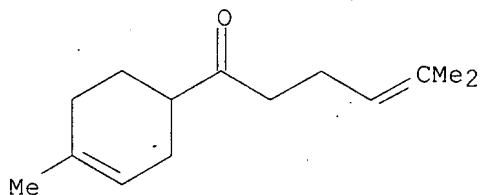


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 123:314184

L51 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2007 ACS on STN
RN 76280-88-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)-, (±)-
DR 4891-80-9
MF C14 H22 O
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, SPECINFO
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

17 REFERENCES IN FILE CA (1907 TO DATE)
17 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:310260

REFERENCE 2: 122:240011

REFERENCE 3: 121:205714

REFERENCE 4: 111:78402

REFERENCE 5: 107:176247

REFERENCE 6: 107:115804

REFERENCE 7: 103:160708

REFERENCE 8: 99:38666

REFERENCE 9: 97:24022

REFERENCE 10: 95:62434

L51 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2007 ACS on STN

RN 59175-60-9 REGISTRY

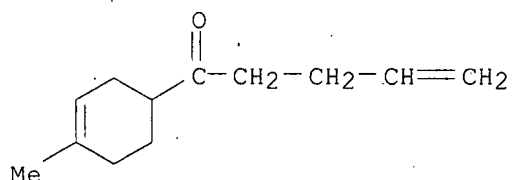
ED Entered STN: 16 Nov 1984

CN 4-Penten-1-one, 1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)

MF C12 H18 O

LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL

(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:245701

REFERENCE 2: 87:184046

REFERENCE 3: 84:179728

=> fil hcaold

FILE 'HCAOLD' ENTERED AT 13:14:58 ON 27 NOV 2007

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PRE-1967 CHEMICAL ABSTRACTS FILE WITH HOUR-BASED PRICING

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

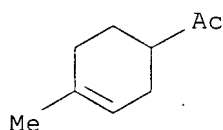
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for

more information.

=> d 154 all hitstr tot

L54 ANSWER 1 OF 2 HCAOLD COPYRIGHT 2007 ACS on STN
AN CA64:19687h CAOLD
TI terpenoids - (X) synthesis of β -bisabolene and dipentene
AU Vig, Om P.; Matta, K. L.; Singh, G.; Raj, I.
IT 495-61-4 4891-80-9 6090-08-0 6090-09-1
6090-10-4 6090-11-5 6157-43-3 21902-26-1 27687-87-2
IT 4891-80-9 6090-09-1
RN 4891-80-9 HCAOLD
RN 6090-09-1 HCAOLD
CN Ethanone, 1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)



L54 ANSWER 2 OF 2 HCAOLD COPYRIGHT 2007 ACS on STN
AN CA64:8246h CAOLD
TI syntheses of (\pm)- β -bisabolene and 2-p-tolyl-6-methylhepta-1,5-diene
AU Manjarrez Moreno, Armando; Guzman, A.
IT 4871-90-3 4871-91-4 4891-77-4 4891-79-6 4891-80-9
4999-58-0 21902-26-1
IT 4891-80-9
RN 4891-80-9 HCAOLD

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 13:15:28 ON 27 NOV 2007
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FILE COVERS 1907 - 27 Nov 2007 VOL 147 ISS 23
FILE LAST UPDATED: 26 Nov 2007 (20071126/ED)

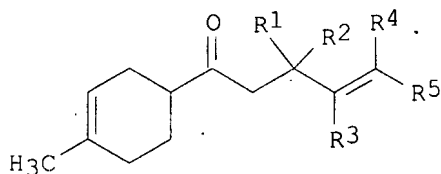
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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 174 bib abs hitind hitstr retable

L74 ANSWER 1 OF 1 HCAPLUS. COPYRIGHT 2007 ACS on STN
 AN 2003:757673 HCAPLUS
 DN 139:245701
 TI Preparation and use of unsaturated ketones as fragrances for
perfumes
 IN **Markert, Thomas; Porrmann, Volker; Rittler,**
Frank
 PA Cognis Deutschland G.m.b.H. & Co. K.-G., Germany
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DT **Patent**
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003078391	A1	20030925	WO 2003-EP1561	20030217 <--
	W: IL, JP, SG, US				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				
	IT, LU, MC, NL, PT, SE, SI, SK, TR				
	DE 10212026	A1	20031002	DE 2002-10212026	20020319 <--
	EP 1485350	A1	20041215	EP 2003-744331	20030217 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
	IE, SI, FI, CY, TR, BG, CZ, EE, HU, SK				
	JP 2005520875	T	20050714	JP 2003-576397	20030217 <--
	US 2005119158	A1	20050602	US 2005-507203	20050124 <--
PRAI	DE 2002-10212026	A	20020319	<--	
	WO 2003-EP1561	W	20030217	<--	
OS	MARPAT 139:245701				
GI					



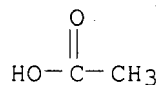
AB Unsatd. ketones [I; R1-R4 = H, (un)satd, (un)branched C1-6 alkyl, cyclic group] are prepared and have interesting and original **odor** characteristics, with good emanation, suitable for use in **perfumes**, etc., are prepared by the reaction of (un)saturated alkenols, having a hydroxyl group alpha to the double bond, with either 1-**acetyl-4-methyl-3-cyclohexene** or 1-[1,1-di(ethoxy)ethyl]-4-methyl-3-cyclohexene in the presence of an acid catalyst. Thus, 1-**acetyl-4-methyl-3-cyclohexene** was reacted with allyl alc. in the presence of sulfuric acid to give 1-(4-methylcyclohex-3-en-1-yl)-4-penten-1-one, which had a fruity, green **odor** with a weak rhubarb after note.

IC ICM C07C0403-16
 ICS C11B0009-00; **A61K0007-46**

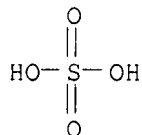
CC 24-5 (Alicyclic Compounds)
 Section cross-reference(s): **62**

ST unsatd ketone fragrance prepn **perfume**;

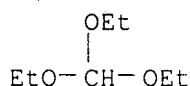
- methylocyclohexenylpentenone fragrance prepn
- IT Alcohols, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (alkenols; preparation of unsatd. ketones as fragrances for **perfumes**
 by the reaction of 1-acetyl-4-methyl-3-cyclohexene or 1-[1,1-di
 (ethoxy)ethyl]-4-methyl-3-cyclohexene with)
- IT **Perfumes**
 (preparation and use of unsatd. ketones as fragrances in **perfumes**)
- IT Acids, uses
 RL: CAT (Catalyst use); USES (Uses)
 (preparation and use of unsatd. ketones as fragrances in **perfumes**
 using as catalysts)
- IT **Odor and Odorous substances**
 (unsatd. ketones; preparation and use of unsatd. ketones as fragrances in **perfumes**)
- IT Ketones, preparation
 RL: COS (Cosmetic use); PRP (Properties); SPN (Synthetic preparation);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (unsatd.; preparation and use of unsatd. ketones as fragrances in **perfumes**)
- IT 64-19-7, Acetic acid, uses 7664-93-9, Sulfuric acid,
 uses
 RL: CAT (Catalyst use); USES (Uses)
 (in the preparation and use of unsatd. ketones as fragrances for **perfumes**)
- IT 122-51-0, Triethyl orthoformate
 RL: NUU (Other use, unclassified); USES (Uses)
 (in the preparation and use of unsatd. ketones as fragrances for **perfumes**)
- IT 107-18-6, Allyl alcohol, reactions 556-82-1,
 3-Methyl-2-buten-1-ol 928-95-0, trans-2-Hexen-1-ol
 6090-09-1 597533-66-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (in the preparation and use of unsatd. ketones as fragrances for **perfumes**)
- IT 59175-60-9P 597533-64-7P 597533-65-8P
 RL: COS (Cosmetic use); PRP (Properties); SPN (Synthetic preparation);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation and use of unsatd. ketones as fragrances for **perfumes**)
- IT 64-19-7, Acetic acid, uses 7664-93-9, Sulfuric acid,
 uses
 RL: CAT (Catalyst use); USES (Uses)
 (in the preparation and use of unsatd. ketones as fragrances for **perfumes**)
- RN 64-19-7 HCAPLUS
 CN Acetic acid (CA INDEX NAME)



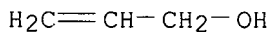
RN 7664-93-9 HCAPLUS
 CN Sulfuric acid (CA INDEX NAME)



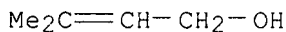
IT 122-51-0, Triethyl orthoformate
 RL: NUU (Other use, unclassified); USES (Uses)
 (in the preparation and use of unsatd. ketones as fragrances for
perfumes)
 RN 122-51-0 HCAPLUS
 CN Ethane, 1,1',1''-[methylidynetris(oxy)]tris- (CA INDEX NAME)



IT 107-18-6, Allyl alcohol, reactions 556-82-1,
 3-Methyl-2-buten-1-ol 928-95-0, trans-2-Hexen-1-ol
 6090-09-1 597533-66-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (in the preparation and use of unsatd. ketones as fragrances for
perfumes)
 RN 107-18-6 HCAPLUS
 CN 2-Propen-1-ol (CA INDEX NAME)

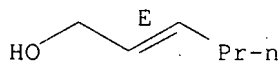


RN 556-82-1 HCAPLUS
 CN 2-Buten-1-ol, 3-methyl- (CA INDEX NAME)

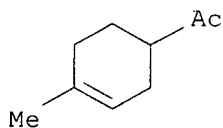


RN 928-95-0 HCAPLUS
 CN 2-Hexen-1-ol, (2E)- (CA INDEX NAME)

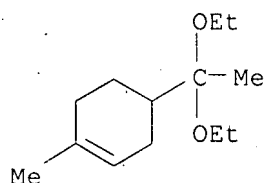
Double bond geometry as shown.



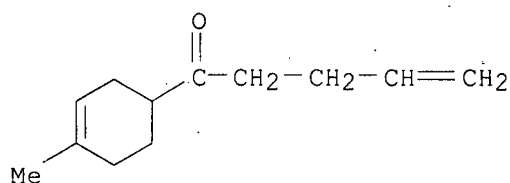
RN 6090-09-1 HCAPLUS
 CN Ethanone, 1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)



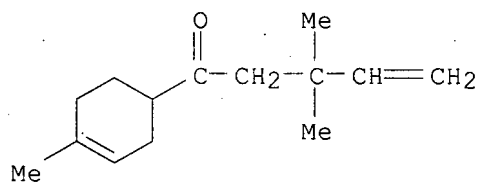
RN 597533-66-9 HCAPLUS
 CN Cyclohexene, 4-(1,1-diethoxyethyl)-1-methyl- (CA INDEX NAME)



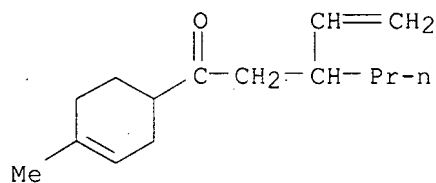
IT 59175-60-9P 597533-64-7P 597533-65-8P
 RL: COS (Cosmetic use); PRP (Properties); SPN (Synthetic preparation);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation and use of unsatd. ketones as fragrances for **perfumes**)
 RN 59175-60-9 HCAPLUS
 CN 4-Penten-1-one, 1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



RN 597533-64-7 HCAPLUS
 CN 4-Penten-1-one, 3,3-dimethyl-1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)



RN 597533-65-8 HCAPLUS
 CN 1-Hexanone, 3-ethenyl-1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)

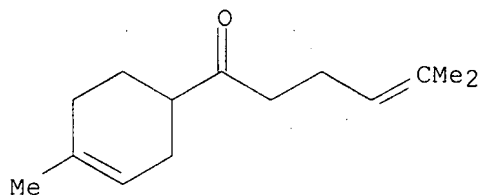


RETABLE
 Referenced Author | Year | VOL | PG | Referenced Work | Referenced

(RAU)	(RPY)	(RVL)	(RPG)	(RWK)	File
Firmenich & Cie	1977			CH 586551 A	HCAPLUS
Fujita, T	1977	26	429	YUKAGAKU	HCAPLUS
Ho, T	1981	11	237	SYNTHETIC COMMUNICAT	HCAPLUS
Thomas, A	1983			US 4392993 A	HCAPLUS
Watanabe, S	1975	25	733	JOURNAL OF APPLIED C	HCAPLUS

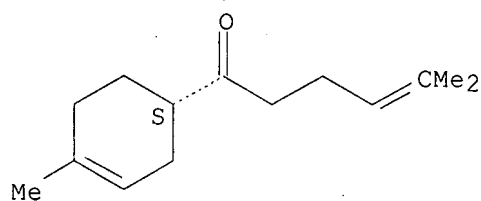
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L77 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:532934 HCAPLUS
 DN 131:310260
 TI Regioselective α -alkylation of silyl enolates using a mild catalyst-ZnCl₂ doped on acidic alumina
 AU Kad, G. L.; Singh, Vasundhara; Khurana, Anupam; Chaudhary, Sangeeta; Singh, Jasvinder
 CS Department of Chemistry, Panjab University, Chandigarh, 160014, India
 SO Synthetic Communications (1999), 29(19), 3439-3442
 CODEN: SYNCAV; ISSN: 0039-7911
 PB Marcel Dekker, Inc.
 DT Journal
 LA English
 OS CASREACT 131:310260
 AB ZnCl₂ doped acidic alumina used as a solid support acts as a better Lewis acid catalyst in the S_N1 reaction of tri-Me silyl enol ethers with tertiary, allylic, and benzylic halides to yield exclusively the substituted product in excellent yields. Thus, treatment of 1-(trimethylsiloxy)cyclohexene with PhCH₂Br in the presence of ZnCl₂/alumina gave 2-benzylcyclohexanone in 65% yield. This method was also employed for the synthesis of the monocyclic sesquiterpene hydrocarbon, (\pm)- β -bisabolene, and 2,6-dimethyl-7-octen-4-one.
 IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (regioselective α -alkylation of silyl enolates by benzylic, allylic, and tertiary halides catalyzed by ZnCl₂-doped acidic alumina)
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)

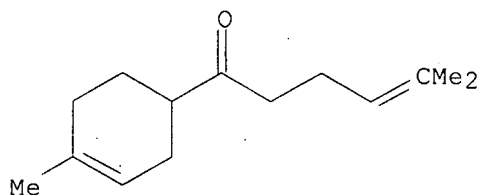


RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Jones, T	1925	127	2530	J Chem Soc	
Pliva, J	1951	16	158	Collin Trav Chim Tch	HCAPLUS
Tsukasa	1982	31	615	Yokagaku	HCAPLUS
Tsukasa	1984	33	233	Yokagaku	HCAPLUS

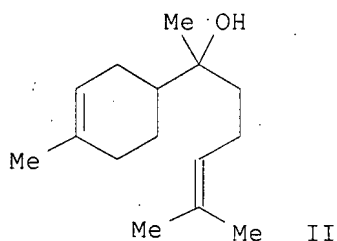
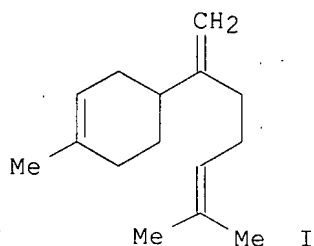


L77 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1995:257039 HCAPLUS
 DN 122:240011
 TI Termite trail attractants: new syntheses of racemic (E)- α -,
 (Z)- α - and β -bisabolenes
 AU Argenti, Laura; Bellina, Fabio; Carpita, Adriano; Dell'Amico, Nicola;
 Rossi, Renzo
 CS Dipartimento di Chimica e Chimica Industriale, Universita di Pisa, Pisa,
 I-56126, Italy
 SO Synthetic Communications (1994), 24(22), 3167-88
 CODEN: SYNCAV; ISSN: 0039-7911
 PB Dekker
 DT Journal
 LA English
 OS CASREACT 122:240011
 AB Racemic (E)- α -bisabolene was synthesized starting from
 4-methyl-3-cyclohexenecarboxylic acid by a reaction sequence involving the
 Pd(0)-catalyzed cross-coupling reaction between the (E)-2-(4-methyl-3-
 cyclohexen-1-yl)-1-propenyltrimethylstannane and 3-methyl-2-buten-1-yl
 acetate. Three different procedures, in which a common precursor was used
 as key intermediate, were tested for the synthesis of racemic
 (Z)- α -bisabolene. The best one, which involved the reaction between
 (Z)-1-bromo-3-(4-methyl-3-cyclohexen-1-yl)-2-butene and $[\text{Me}_2\text{C}:\text{CH}]_2\text{CuLi}$,
 afforded a mixture of (Z)- and (E)- α -bisabolene in 93:7 molar ratio.
 Finally, racemic β -bisabolene was synthesized by a simple reaction
 sequence involving the Zr-promoted methylenation of 2-methyl-6-oxo-(4-
 methyl-3-cyclohexen-1-yl)-2-hexene.
 IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (new syntheses of racemic (E)- α -, (Z)- α - and
 β -bisabolenes)
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX
 NAME)

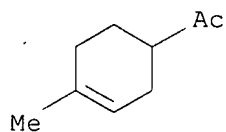


L77 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1994:605714 HCAPLUS

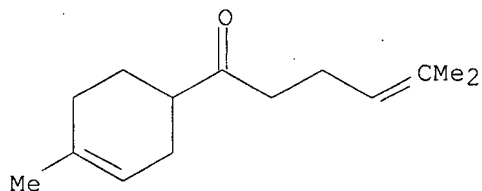
DN 121:205714
 TI Total synthesis of (\pm)- β -bisabolene and (\pm)- α -bisabolol
 AU Wang, Huichen; Huang, Zhixi
 CS Fragrance Industry Inst., Ministry of Light Industry, Shanghai, Peop. Rep. China
 SO Huaxue Shijie (1993), 34(7), 308-11
 CODEN: HUAKAB; ISSN: 0367-6358
 DT Journal
 LA Chinese
 GI



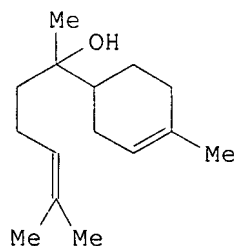
AB Title compds. I and II were prepared in 15.9 and 16.7% yield resp. starting from Diels-Alder reaction of CH₂:CMeCH:CH₂ with CH₂:CHCOMe.
 IT **6090-09-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and alkylation of)
 RN 6090-09-1 HCAPLUS
 CN Ethanone, 1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)



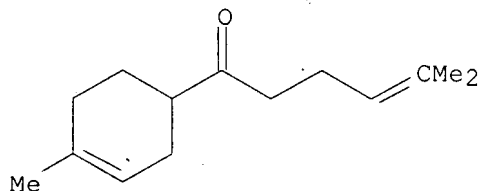
IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and methylenation of)
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1989:478402 HCAPLUS
 DN 111:78402
 TI Organomanganese(II) reagents. XIV. A short and efficient synthesis of diastereoisomeric (\pm)- α -bisabolols and (\pm)-chlorphenoxamine
 AU Cahiez, Gerard; Rivas-Enterrios, Jose; Clery, Patrick
 CS Lab. Chim. Organoelem., Univ Pierre et Marie Curie, Paris, F-75252, Fr.
 SO Tetrahedron Letters (1988), 29(30), 3659-62
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 OS CASREACT 111:78402
 GI



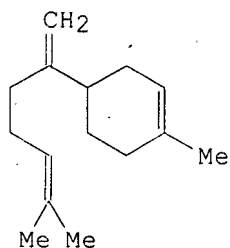
AB Diastereoisomeric (\pm)- α -bisabolols I, a sesquiterpenoid alc., and (\pm)-4-ClC₆H₄CMePhOCH₂CH₂NMe₂, an antihistamine, were prepared in excellent yields. Both syntheses involve as a key step the one-pot elaboration of an unsym. tertiary alc. via an organomanganese reagent, i.e. Me₂C:CHCH₂CH₂MnBr to I and p-ClC₆H₄COCl and PhMnBr to p-ClC₆H₄CMePhOH.
 IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and carbonyl methylation of)
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



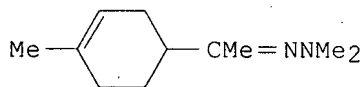
L77 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1987:576247 HCAPLUS
 DN 107:176247
 TI New synthesis of β -bisabolene via 1-(4-methyl-3-cyclohexenyl)-1-

ethanone N,N-dimethylhydrazone

AU Yamashita, Masakazu; Matsumiya, Kaoru; Tanji, Katsumi; Suemitsu, Rikisaku
 CS Dep. Appl. Chem., Doshisha Univ., Kyoto, 602, Japan
 SO Yukagaku (1986), 35(12), 1041-3
 CODEN: YKGKAM; ISSN: 0513-398X
 DT Journal
 LA English
 OS CASREACT 107:176247
 GI

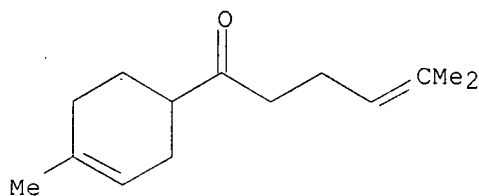


I

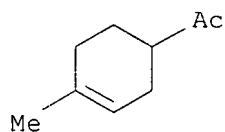


II

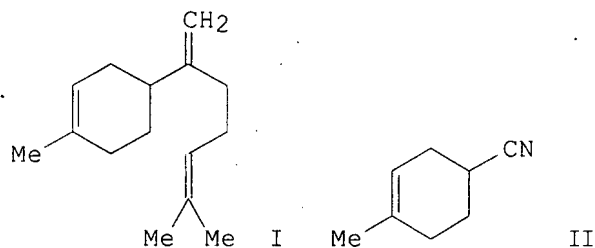
AB A convenient synthesis of β -bisabolene (I), the component of the essential oil of lemon, lime, bergamot, etc., was synthesized in 5 steps starting from Me vinyl ketone and isoprene via N,N-dimethylhydrazone II.
 IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and Wittig reaction of, with methyltriphenylphosphonium bromide)
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



IT **6090-09-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with dimethylhydrazine)
 RN 6090-09-1 HCAPLUS
 CN Ethanone, 1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)



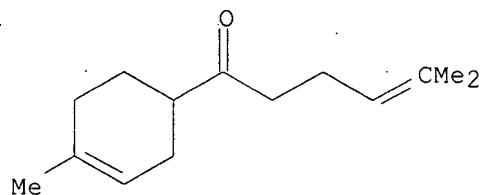
L77 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1987:515804 HCAPLUS
 DN 107:115804
 TI New synthesis of (\pm)- β -bisabolene
 AU Wu, Dajun; Dan, Yanshe; Yan, Binchun
 CS Dep. Fine Chem., East China Inst. Chem. Technol., Shanghai, Peop. Rep. China
 SO Huadong Huagong Xueyuan Xuebao (1985), 11(4), 447-50
 CODEN: HHKPDM; ISSN: 0253-9683
 DT Journal
 LA Chinese
 GI



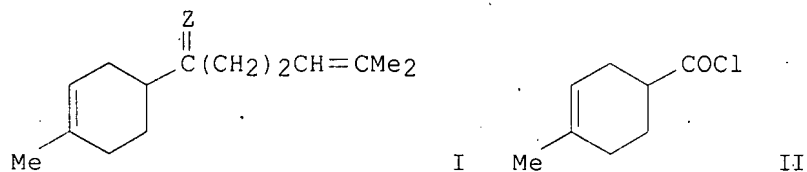
AB The title compound (I, X = CH₂) was prepared in 3 steps in 40% yield by Diels-Alder reaction of H₂C:CMeCH:CH₂ with H₂C:CHCN, Grignard reaction of cyanocyclohexene II with Me₂C:CHCH₂CH₂MgI, and methylenation of I (X = O) with Ph₃P+MeBr-.

IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and methylenation of)

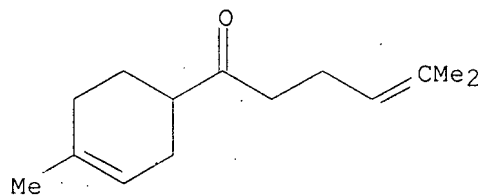
RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1985:560708 HCAPLUS
 DN 103:160708
 TI Total synthesis of (\pm)- β -bisabolene
 AU Duan, Yongxi; Wu, Dajun; Chu, Jiyu; Wang, Meili; Yan, Binchun
 CS East China Inst. Chem. Technol., Shanghai, Peop. Rep. China
 SO Yiyao Gongye (1985), 16(3), 120-2
 CODEN: YIGODN; ISSN: 0255-7223
 DT Journal
 LA Chinese
 GI



AB (\pm)- β -Bisabolene (I, Z = CH₂) was prepared by Grignard coupling of the cyclohexenylcarbonyl chloride II with Me₂C:CH(CH₂)₂Br in the presence of CuCl and Wittig methylenation as the resulting I (Z = O).
 IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and Wittig methylenation of)
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1983:438666 HCAPLUS
 DN 99:38666
 TI Chemistry of organosilicon compounds - 165. 2-(Trimethylsilylmethyl)-1,3-butadiene - a versatile building block for terpene synthesis
 AU Sakurai, Hideki; Hosomi, Akira; Saito, Masaki; Sasaki, Koshi; Iguchi, Hirokazu; Sasaki, Junichi; Araki, Yoshitaka
 CS Dep. Chem., Tohoku Univ., Sendai, 980, Japan
 SO Tetrahedron (1983), 39(6), 883-94
 CODEN: TETRAB; ISSN: 0040-4020
 DT Journal
 LA English
 AB Me₃SiCH₂C(:CH₂)CH:CH₂, prepared by Grignard coupling of Me₃SiCH₂Cl with CH₂:C(Cl)CH:CH₂, isoprenylated acid chlorides, aldehydes, ketones, and

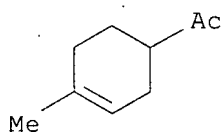
acetals in the presence of Lewis acids and underwent Diels-Alder reaction with dienophiles with high regiospecificity to give synthons for limonene, δ -terpineol, isobisabolene, etc.

IT 6090-09-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 6090-09-1 HCAPLUS

CN Ethanone, 1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)

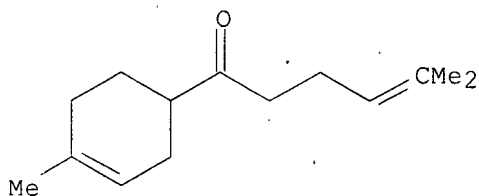


IT 76280-88-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, via Diels-Alder reaction of isoprenylsilane with methyloctadienone)

RN 76280-88-1 HCAPLUS

CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1982:424022 HCAPLUS

DN 97:24022

TI Chemistry of organosilicon compounds. 152. Highly regioselective Diels-Alder reactions of 2-trimethylsilylmethyl-1,3-butadiene catalyzed by a Lewis acid and applications to syntheses of terpenes

AU Hosomi, Akira; Iguchi, Hirokazu; Sasaki, Junichi; Sakurai, Hideki

CS Dep. Chem., Tohoku Univ., Sendai, 980, Japan

SO Tetrahedron Letters (1982), 23(5), 551-4

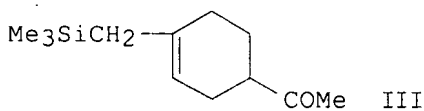
CODEN: TELEAY; ISSN: 0040-4039

DT Journal

LA English

OS CASREACT 97:24022

GI



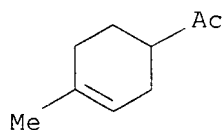
AB CH₂:C(CH₂SiMe₃)CH:CH₂ (I) undergoes highly regioselective Diels-Alder reactions with dienophiles, e.g. acrolein and CH₂:CHCOMe (II), in the presence of AlCl₃ to give "para" isomers almost exclusively. The adducts are readily converted to a variety of mono- and sesquiterpenes. E.g., I with II and AlCl₃ in C₆H₆ at 15-20° for 3.5 h gave 64% of the adduct III. Methylenation of III followed by regioselective protodesilylation with HCl in MeOH or CsF in DMSO gave p-mentha-1(7),8-diene and limonene, resp. Desilylation followed by methylation with MeMgBr gave α- and δ-terpineol, resp. Similarly, the adduct of I with 7-methylocta-1,6-dien-3-one and cryptone, resp., were converted to derivs. of bisabolanes and cadinanes.

IT 6090-09-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and methylation of, terpineol by)

RN 6090-09-1 HCAPLUS

CN Ethanone, 1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)

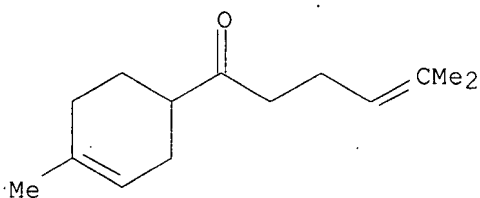


IT 76280-88-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, methylation, and methylenation of)

RN 76280-88-1 HCAPLUS

CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1981:462434 HCAPLUS

DN 95:62434

TI β-Bisabolene synthesis: Carroll approach

AU Ho, Tse-Lok

CS Org. Chem. Div., SCM Corp., Jacksonville, FL, 32201, USA

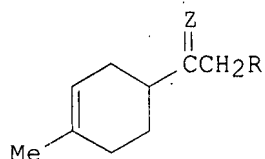
SO Synthetic Communications (1981), 11(3), 237-9

CODEN: SYNCAV; ISSN: 0039-7911

DT Journal

LA English

GI



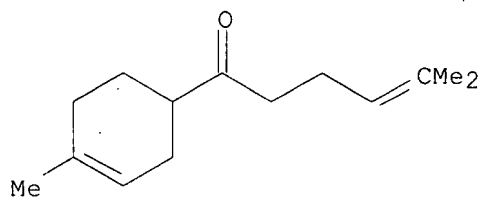
I

AB Carroll reaction of the keto ester I ($Z = O$, $R = CO_2Et$) with 1.5 equiv $HOCHMe_2CH:CH_2$ at $150-70^\circ$ in the presence of 1 mol % $Al(OCHMe_2)_3$ gave .56% norbisabolene I ($Z = O$, $R = CH_2CH:CMe_2$), whose Wittig methylenation gave β -bisabolene (I, $Z = CH_2$, $R = CH_2CH:CMe_2$).

IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and Wittig methylenation of)

RN 76280-88-1 HCAPLUS

CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1981:47520 HCAPLUS

DN 94:47520

TI Synthesis of (\pm)- β -bisabolene

AU Ho, Tse-Lok; Liu, Shing-Hou

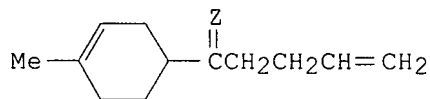
CS Org. Chem. Div., SCM Corp., Jacksonville, FL, 32201, USA

SO Synthetic Communications (1980), 10(8), 603-5
 CODEN: SYNCAV; ISSN: 0039-7911

DT Journal

LA English

GI

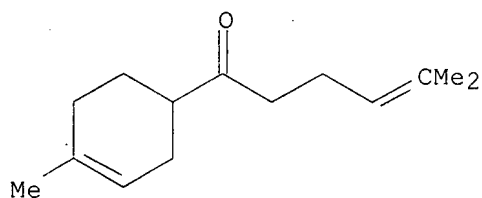


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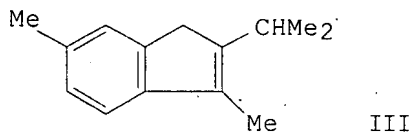
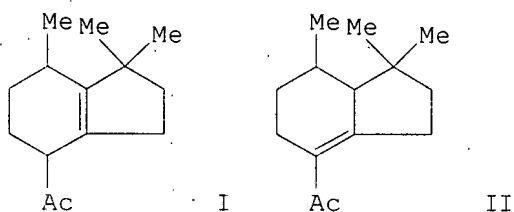
AB (\pm)- β -Bisabolene I ($Z = CH_2$) was prepared by pyrolysis of nopinone, Diels-Alder reaction of $CH_2:CHCOCH_2CH_2CH:CMe_2$ with isoprene, and Wittig methylenation of I ($Z = O$).

IT **76280-88-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and methylenation of)

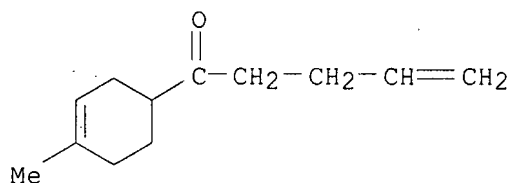
RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



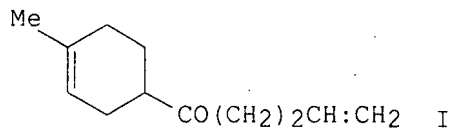
L77 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1977:584046 HCAPLUS
 DN 87:184046
 OREF 87:29067a,29070a
 TI Synthesis of new cyclohexenyl ketones from various conjugated diene hydrocarbons
 AU Fujita, Tsutomu; Watanabe, Shoji; Suga, Kyoichi; Yokoyama, Toshiro
 CS Fac. Eng., Chiba Univ., Chiba, Japan
 SO Yukagaku (1977), 26(7), 429-32
 CODEN: YKGKAM; ISSN: 0513-398X
 DT Journal
 LA Japanese
 GI



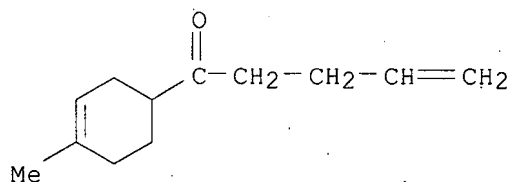
AB New cyclohexenyl alkenyl ketones were obtained by the reaction of various Me cyclohexene carboxylates and $\text{CH}_2:\text{CHMgCl}$. E.g., 1-(4-methyl-3-cyclohexen-1-yl)-4-penten-1-one was produced from Me 4-methyl-3-cyclohexene-1-carboxylate and $\text{CH}_2:\text{CHMgCl}$. Several hydroindene derivs. were prepared from $\text{CH}_2:\text{CMeCH}:\text{CHCH}_2\text{CH}_2\text{CMe}:\text{CH}_2$ via Diels-Alder reaction followed by acidic cyclization. E.g., I-III were obtained by the cyclization of 4-acetyl-1-methyl-3-(3-methyl-3-butenyl)-1-cyclohexene.
 IT 59175-60-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 59175-60-9 HCAPLUS
 CN 4-Penten-1-one, 1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1976:179728 HCAPLUS
 DN 84:179728
 OREF 84:29115a,29118a
 TI A new preparative method for cyclohexenyl alkenyl ketones
 AU Watanabe, Shoji; Fujita, Tsutomu; Suga, Kyoichi; Yokoyama, Toshiro
 CS Dep. Appl. Chem., Chiba Univ., Chiba, Japan
 SO Journal of Applied Chemistry & Biotechnology (1975), 25(10), 733-6
 CODEN: JACBBD; ISSN: 0375-9210
 DT Journal
 LA English
 GI

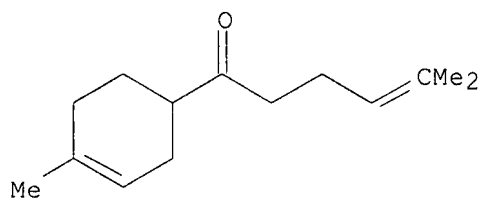


AB Me cyclohexenylcarboxylate, prepared by AlCl_3 -catalyzed reaction of $\text{CH}_2:\text{CMeCH}:\text{CH}_2$ with $\text{CH}_2:\text{CHCO}_2\text{Me}$, reacted with $\text{CH}_2:\text{CHMgCl}$ in refluxing THF to give 1-oxo-4-pentene I. Other γ,δ -unsatd. cyclic esters, prepared by similar methods, reacted similarly to give sweet smelling ketones. At 30° 3-hydroxy-3-(4'-methyl-3'-cyclohexene-1'-yl)-1,4-pentadiene was also produced as a by-product with I.
 IT **59175-60-9P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 59175-60-9 HCAPLUS
 CN 4-Penten-1-one, 1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)

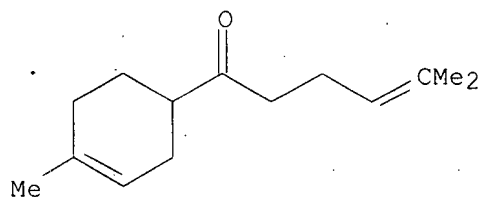


L77 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1972:72664 HCAPLUS
 DN 76:72664

OREF 76:11705a,11708a
 TI Terpenoids. LVIII. New syntheses of isobisabolene, β -bisabolene, and β -terpineol
 AU Vig, O. P.; Sharma, S. D.; Matta, K. L.; Sehgal, J. M.
 CS Dep. Chem., Panjab Univ., Chandigarh, India
 SO Journal of the Indian Chemical Society (1971), 48(11), 993-9
 CODEN: JICSAH; ISSN: 0019-4522
 DT Journal
 LA English
 OS CASREACT 76:72664
 AB Isobisabolene (I), β -bisabolene, and β -terpineol were prepared via β -oxo sulfoxides.
 IT **76280-88-1P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)

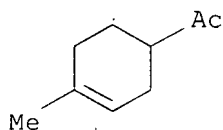


L77 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1970:21789 HCAPLUS
 DN 72:21789
 OREF 72:4001a,4004a
 TI Synthesis of d,l-bisabolol
 AU Kuznetsov, N. V.; Myrsina, R. A.
 CS Inst. Org. Khim., Kiev, USSR
 SO Dopovidi Akademii Nauk Ukrain's'koi RSR, Seriya B: Geologiya, Geofizika, Khimiya ta Biologiya (1969), 21(9), 810-11
 CODEN: DBGGM; ISSN: 0002-3523
 DT Journal
 LA Ukrainian
 GI For diagram(s), see printed CA Issue.
 AB A new advantageous variant in preparation of the title compds., presumed to have insecticidal and (or) herbicidal properties was described. Thus, tetrahydro-p-tolunitrile (I) was reacted, while boiling in ether solution, with a Grignard reagent derived from 2-methyl-5-bromopentene to give 76.7% 4-methyl-1-(1-oxo-5-methylhex-4-enyl)-3-cyclohexene (II), b14 157°. II was added dropwise into ether solution of MeMgI at <5° and the resulting mixture was boiled 7 hr to give 62.5% dl-bisabolol (III), b0-2 107-9°. Alternately, reaction of I with MeMgI gave 83.3% 1-methyl-4-acetylcyclohexane, followed by reaction with a Grignard reagent prepared from 2-methyl-5-bromopentene to give III; III acetate b0.3 122-3°.
 IT **76280-88-1P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)

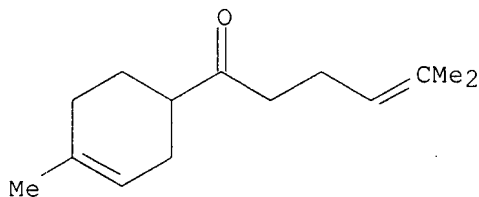


L77 ANSWER 17 OF 20 HCAPLUS . COPYRIGHT 2007 ACS on STN
 AN 1966:104455 HCAPLUS
 DN 64:104455
 OREF 64:19687h,19688a-d
 TI Terpenoids. X. Synthesis of β -bisabolene and dipentene
 AU Vig, O. P.; Matta, Khushi Lall; Singh, Gurdip; Raj, Inder
 CS Panjab Univ., Chandigarh
 SO J. Indian Chem. Soc. (1966), 43(1), 27-31
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB cf. preceding abstract Dry C₆H₆ (100 ml.) containing 0.5 g. p-MeC₆H₄SO₃H and 14.2 g. 4-methyl-1-(1',1'-ethylenedioxyethyl)cyclohexan-4-ol refluxed 4-5 hrs. on a water bath and the cooled mixture freed from p-MeC₆H₄SO₃H with 5% aqueous NaHCO₃, extracted with Et₂O and the product distilled yielded 75.19% 4-methyl-1-(1', 1'-ethylenedioxyethyl)-3-cyclohexene, b₂₋₃ 90°, n_D^{19.5} 1.4720, deketalized in Me₂CO and 10% HCl to yield 81.94% 4-methyl-1-acetyl-3-cyclohexene (I), b₂₋₃ 72.75°, n_D^{19.5} 1.4700 [semicarbazone, m. 154° (dilute alc.)], ν 2900, 1720, 1435, 1165 cm.⁻¹ NaH (3.5 g.) added with stirring (N atmospheric) to 7.9 g. Et₂CO₃ in 100 ml. C₆H₆ containing 15.5 g. HCONMe₂ and the mixture treated dropwise at 60° with 4.7 g. I, the mixture refluxed 2 hrs. and the cooled mixture poured into H₂O, extracted with C₆H₆ and the residue on evaporation distilled in vacuo gave 53.0% yield of Et β -oxo- β -(4-methyl-3-cyclohexenyl)propionate (II), b₁₂ 140-5°, n_D²² 1.4750, giving a violet color in alc. FeCl₃. Me₃COK (0.65 g. K, 50 ml. Me₃COH) treated at 5° with 3.4 g. II in 10 ml. Me₃COH and the cooled mixture treated dropwise with 2.5 g. Me₂C:CHCH₂Br, the mixture refluxed 10 hrs. and the product extracted with Et₂O gave 2.8 g. β -oxo ester III (R = CO₂Et, R' = O) (IV), b₁₂ 170-80°, n_D²² 1.4830, giving a violet color with alc. FeCl₃. IV (2.5 g.) refluxed 10 hrs. in 45 ml. 1:2 H₂O-MeOH containing 1.75 g. KOH and the residue on evaporation acidified with dilute HCl, extracted with Et₂O and the residue on evaporation heated at 160-70° (oil bath) with 0.2 g. Cu powder gave 0.95 g. ketone III (R = H, R' = O) (V), b₂₋₃ 128-80°, n_D^{19.5} 1.5030, ν 1720, 1460, 1380, 815 cm.⁻¹ Me₂SO (6 ml.) and 0.35 g. NaH stirred at 0° (N atmospheric) with addition of 2.9 g. MePPh₃I in 12.5 ml. and the mixture stirred 15 min. at 25°, treated with 0.7 g. V in 10 ml. tetrahydrofuran and stirred 2 hrs. at 50°, the cooled mixture poured into 20 ml. cold H₂O and the product extracted into petr. ether gave 1.05 g. β -bisabolene III (R = H, R' = CH₂), C₁₅H₂₄, b₂₋₃ 100-5°, n_D^{19.5} 1.5090, ν 2900, 1650, 1460, 1380, 890, 815 cm.⁻¹. A preparation of methylenephosphorane from 0.36 g. NaH, 3.5 ml. Me₂SO, and 3 g. Ph₃PMeI in 7.2 ml. Me₂SO (N atmospheric) treated with 6.5 g. I in 7 ml. tetrahydrofuran gave 77.5% yield of dipentene (VI), b₂₋₃ 55°, n_D^{20.5} 1.4850, ν 2900, 1650, 1435, 1380, 890 cm.⁻¹.

IT 6090-09-1P, Ketone, methyl 4-methyl-3-cyclohexen-1-yl
76280-88-1P, 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)-
RL: PREP (Preparation)
(preparation of)
RN 6090-09-1 HCAPLUS
CN Ethanone, 1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)



RN 76280-88-1 HCAPLUS
CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1966:104454 HCAPLUS

DN 64:104454

OREF 64:19687f-h

TI Terpenoids. IX. Synthesis of (±)-isopulegone

AU Vig, O. P.; Matta, Khashi Lall; Anand, Romesh; Raj, Inder

CS Panjab Univ., Chandigarh

SO J. Indian Chem. Soc. (1965), 42(12), 841-2

DT Journal

LA English

GI For diagram(s), see printed CA Issue.

AB cf. preceding abstract (±)-isopulegone (I), a component of essential oils, was synthesized and its structure determined (CA 61, 13347e), had ir peaks at 1725, 1060, and 1465 cm.⁻¹ A solution of methylsulfinyl carbanion was prepared under N from 0.68 g. NaH and 7 g. Me₂SO. The solution was cooled, stirred during addition of 5.76 g. Ph₃MeI in 14 ml. Me₂SO, stirred 15 min. at room temperature, 1.4 g. II in 12 ml. tetrahydrofuran was added and stirring continued for 2 hrs. to give 58.9% III, b. 100°/3-4 mm., n_D²⁰ 1.4740. To 0.5 g. III was added 12 ml. acetone, 0.15 g. p-MeC₆H₄SO₃H, and 1.5 ml. H₂O and the mixture stirred at room temperature for 1 hr. to give 54%

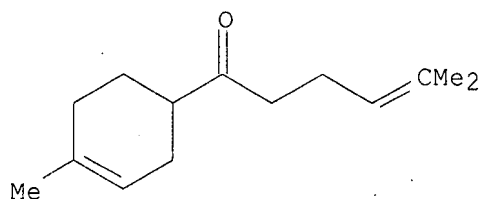
I, b. 70°/2-3 mm., n_D²⁰ 1.4700°; 2,4-dinitrophenylhydrazone m. 136° (EtOH).

IT 76280-88-1

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 76280-88-1 HCAPLUS

CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



L77 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1966:44018 HCAPLUS

DN 64:44018

OREF 64:8246h,8247a-b

TI Syntheses of (±)-β-bisabolene and 2-p-tolyl-6-methylhepta-1,5-diene

AU Moreno, A. Manjarrez; Guzman, A.

CS Univ. Nacl. Autonoma Mexico, Mexico, D.F.

SO Journal of Organic Chemistry (1966), 31(1), 348-9

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

GI For diagram(s), see printed CA Issue.

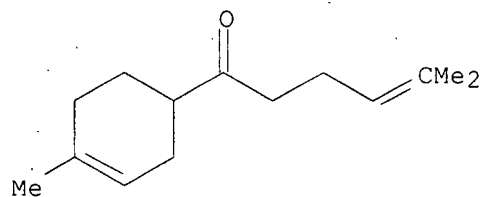
AB Me₂C:CHCH₂CH₂MgBr coupled with 4-methyl-1-carboxy-3-cyclohexene acid chloride and the product fractionally distilled gave the oxo compound (I, R = O) (II). II reduced with NaBH₄ in MeOH gave the alc. I (R = H, OH). II treated with [Ph₃MeP] Br in anhydrous Et₂O gave the desired (±)-β-bisabolene I (R = CH₂) trihydrochloride. The compound showed identical N.M.R., ir, and retention times on a silicone SE-30 column at 200° as β-bisabolene obtained from lanceol. Me₂C:CHCH₂CH₂MgBr coupled with p-MeC₆H₄COCl gave the ketone (III, R = O). Treatment of the ketone with [Ph₃MeP]Br gave material, purified by thin-layer chromatography on silica gel from 95:5 C₆H₁₄-EtOAc to yield pure III (R = CH₂) (IV). Dehydration of 2-p-tolyl-6-methylhept-5-en-2-ol by refluxing in 10% aqueous (CO₂H)₂ 4 hrs. and chromatographic purification of the isolated oily product gave 20% V and 60% IV.

IT 76280-88-1P, 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)-

RL: PREP (Preparation)
(preparation of)

RN 76280-88-1 HCAPLUS

CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



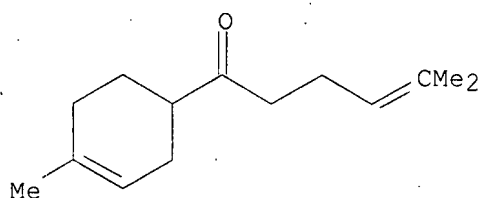
L77 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1966:44017 HCAPLUS

DN 64:44017

OREF 64:8246f-h

TI Terpenes. CLXXVI. Isolation and structure of dimethoxydihydrofuroeremophilane
 AU Novotny, L.; Samek, Z.; Sorm, F.
 CS Csl. Akad. Ved, Prague
 SO Collection of Czechoslovak Chemical Communications (1966), 31(1), 371-4
 CODEN: CCCCAK; ISSN: 0010-0765
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 63, 18174h. 8,12-Dimethoxydihydrofuroeremophilane (I), isolated from the rhizomes of *Petasites hybridus* (CA 57, 9886f) has been assigned structure I as more probable than Ia on the basis of hydrogenation and N.M.R. spectra. I, isolated from petroleum ether eluates after chromatography of the rhizome extract, m. 103°, $[\alpha]_{20D}$ 66.3°. Hydrogenation of 300 mg. I in 20 ml. AcOH over 200 mg. PtO₂ gave oily II and crystalline III, m. 125°.
 IT 76280-88-1
 (Derived from data in the 7th Collective Formula Index (1962-1966))
 RN 76280-88-1 HCAPLUS
 CN 4-Hexen-1-one, 5-methyl-1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



=> fil uspatful

FILE 'USPATFULL' ENTERED AT 13:16:05 ON 27 NOV 2007

CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 27 Nov 2007 (20071127/PD)

FILE LAST UPDATED: 27 Nov 2007 (20071127/ED)

HIGHEST GRANTED PATENT NUMBER: US7302709

HIGHEST APPLICATION PUBLICATION NUMBER: US2007271667

CA INDEXING IS CURRENT THROUGH 27 Nov 2007 (20071127/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 27 Nov 2007 (20071127/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2007

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2007

=> => d 178 bib abs hitstr

L78 ANSWER 1 OF 1 USPATFULL on STN

AN 2005:138508 USPATFULL

TI Use of unsaturated ketones as a perfume

IN Markert, Thomas, Monheim, GERMANY, FEDERAL REPUBLIC OF
 Pörmann, Volker, Hilden, GERMANY, FEDERAL REPUBLIC OF
 Rittler, Frank, Düsseldorf, GERMANY, FEDERAL REPUBLIC OF

PI US 2005119158 A1 20050602

AI US 2003-507203 A1 20030217 (10)

WO 2003-EP1561 20030217

PRAI DE 2002-10212026 20020319

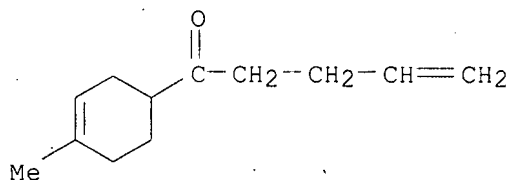
DT Utility
 FS APPLICATION
 LREP OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET,
 ALEXANDRIA, VA, 22314, US
 CLMN Number of Claims: 7
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 338

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

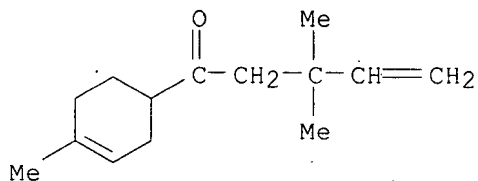
AB Unsaturated ketones of general formula (I) where the groups R1, R2, R3, R4 and R5 independently .dbd.H or 1-6 C alkyl groups, which can be saturated or unsaturated, straight-chained, branched or cyclic are characterised by an interesting and original odour characteristic with good emanation and are suitable for use as perfumes, for example in cosmetic preparations, technical products or alcoholic perfumery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

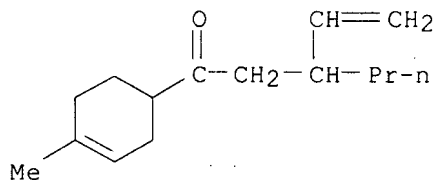
IT 59175-60-9P 597533-64-7P 597533-65-8P
 (preparation and use of unsatd. ketones as fragrances for perfumes)
 RN 59175-60-9 USPATFULL
 CN 4-Penten-1-one, 1-(4-methyl-3-cyclohexen-1-yl)- (9CI) (CA INDEX NAME)



RN 597533-64-7 USPATFULL
 CN 4-Penten-1-one, 3,3-dimethyl-1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)



RN 597533-65-8 USPATFULL
 CN 1-Hexanone, 3-ethenyl-1-(4-methyl-3-cyclohexen-1-yl)- (CA INDEX NAME)



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(FILE 'HOME' ENTERED AT 12:36:18 ON 27 NOV 2007)
DEL HIS

FILE 'HCAPLUS' ENTERED AT 12:37:18 ON 27 NOV 2007

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E MARKERT T/AU
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E PORRMANN/AU
L4 14 S E9
E PORMAN/AU
E RITTNER/AU
L5 7 S E4,E5
E KAO/CO
L6 16788 S E4,E18-E47
E E23+ALL
L7 19329 S E2+RT OR E2-E18/PA,CS
E KAO/CO
L8 16766 S E3,E4,E11-E15,E18-E36
L9 47 S E37-E48
L10 3 S E51,E52
L11 260 S E75-E78,E80-E84
L12 68 S E85-E90
L13 29 S E91-E96
L14 2399 S E100-E122
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L15 10 S E26-E36
L16 14414 S E37-E46,E50-E60
L17 15597 S E61-E120
L18 1153 S E121-E155
L19 3 S E168,E169
L20 255 S E219-E228,E231-E240
L21 65 S E241-E250
L22 27 S E258-E271
L23 1770 S E277-E288
L24 1469 S E289-E335
L25 2 S E347
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L34 1 S L32,L33
SEL RN

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FILE 'HCAOLD' ENTERED AT 13:02:40 ON 27 NOV 2007

L52 2 S L51
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SEL AN
EDIT E23-E24 /AN /OREF;FIL HCAPLUS;S E23-E24
EDIT /AN
DEL SEL
SEL AN L54
EDIT /AN /OREF

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L58 2 S L56 AND L57
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L71 1 S L60 AND (TOILET? OR PERFUM? OR ODOR? OR ODOUR? OR MALODOR? OR
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L77 20 S L75,L76

FILE 'USPATFULL' ENTERED AT 13:12:12 ON 27 NOV 2007

L78 1 S L51

FILE 'REGISTRY' ENTERED AT 13:14:40 ON 27 NOV 2007

FILE 'HCAOLD' ENTERED AT 13:14:58 ON 27 NOV 2007

FILE 'HCAPLUS' ENTERED AT 13:15:28 ON 27 NOV 2007

FILE 'USPATFULL' ENTERED AT 13:16:05 ON 27 NOV 2007

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